



November 4, 2016

Mr. Kale Hanner
Environmental Engineer
ONEOK, Inc.
100 W Fifth Street
Tulsa, OK 74103

Re: Air Pollution Control
Title V (Renewal)
Permit to Operate

Dear Mr. Hanner:

Pursuant to the Air Pollution Control Rules of the State of North Dakota, the Department of Health has reviewed your permit renewal application dated June 23, 2016 and supplemental information dated August 30, 2016 and September 29, 2016, for the Grasslands Gas Plant located in McKenzie County, North Dakota.

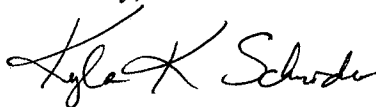
Enclosed is a copy of the Department's draft/proposed Title V Permit to Operate and statement of basis for the facility. Before making final determinations on the permit application, the Department of Health must solicit public comment by means of the enclosed public notice, to be immediately followed by a 45-day Environmental Protection Agency (EPA) review period. As indicated in the notice, the 30-day public comment period will begin November 17, 2016 and end December 17, 2016.

If any changes are subsequently made to the draft permit, then a review copy of the proposed permit reflecting those changes will be provided to EPA prior to the start of a 45-day EPA review period. The 45-day EPA review period will begin December 18, 2016 and end February 1, 2017.

All comments received will be considered in the final determination concerning issuance of the permit. The Department will take final action on the permit application following the public comment period and the EPA review period. You will be notified in writing of our final determination.

If you have any questions, please contact me at (701)328-5188 or email kkschneider@nd.gov.

Sincerely,



Kyla K. Schneider
Environmental Scientist
Division of Air Quality

KKS:saj

Enc:

xc/enc: Mike Owens, EPA R8 (email)

NOTICE OF INTENT TO ISSUE AN
AIR POLLUTION CONTROL
TITLE V PERMIT TO OPERATE

Take notice that the North Dakota Department of Health (NDDoH) proposes to issue a renewal Air Pollution Control Permit to Operate to ONEOK Rockies Midstream, L.L.C. for operation of the Grasslands Gas Plant in accordance with the ND Air Pollution Control Rules. The facility is located at T148 R105 Sec. 36 in McKenzie County. The facility processes natural gas for delivery to market. The ONEOK Rockies Midstream, L.L.C. mailing address is 100 West Fifth Street, Tulsa, OK 74103. The draft renewal permit reflects administrative changes and does not increase permitted emissions.

A thirty-day public comment period for the draft permit will begin November 17, 2016 and end December 17, 2016. Direct comments in writing to the NDDoH, Division of Air Quality, 918 E Divide Avenue, Bismarck, ND 58501-1947. Comments must be received by the end of the public comment period to be considered in the final permit determination. A public hearing regarding issuance of the permit will be held if a significant degree of public interest exists as determined by the NDDoH. Requests for a public hearing must be received in writing by the NDDoH before the end of the public comment period.

The notice, draft permit, statement of basis and application are available for review at the NDDoH address, at the McKenzie County Auditor's office in Watford City, and on the Division of Air Quality website at <http://www.ndhealth.gov/AQ/PublicCom.aspx>. A copy of these documents may be obtained by writing to the Division of Air Quality or contacting Kyla Schneider at (701)328-5188 or emailing kkschneider@nd.gov.

Dated this 4TH day of November, 2016.

Terry L. O'Clair, P.E.
Director
Division of Air Quality

**AIR POLLUTION CONTROL**
TITLE V PERMIT TO OPERATE

Permittee: Name: ONEOK Rockies Midstream, L.L.C. Address: 100 West Fifth Street Tulsa, OK 74103-4298	Permit Number: T5-083005 Source Name: Grasslands Gas Plant
Source Location: SE¼, Sec. 36, T148N, R105W McKenzie County, North Dakota	Source Type: Natural Gas Processing
Expiration Date: December 26, 2021	

Pursuant to Chapter 23-25 of the North Dakota Century Code, and the Air Pollution Control Rules of the State of North Dakota, Article 33-15 of the North Dakota Administrative Code (NDAC), and in reliance on statements and representations heretofore made by the permittee designated above, a Title V Permit to Operate is hereby issued authorizing such permittee to operate the emissions units at the location designated above. This Title V Permit to Operate is subject to all applicable rules and orders now or hereafter in effect of the North Dakota Department of Health and to any conditions specified on the following pages. All conditions are enforceable by EPA and citizens under the Clean Air Act unless otherwise noted.

Renewal No. 4: TBD
Revision No. 0: __________
Terry L. O'Clair, P.E.
Director
Division of Air Quality

Grasslands Gas Plant
Title V Permit to Operate
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1. **Emission Unit Identification:**

The emission units regulated by this permit are as follows:

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
Regeneration natural gas-fired heater rated at 2.73×10^6 Btu/hr [H-101]	1 (Reg)	1	None
Regeneration natural gas-fired heater rated at 2.73×10^6 Btu/hr [H-402]	2 (Reg)	2	None
Regeneration natural gas-fired heater rated at 2.73×10^6 Btu/hr [H-404]	3 (Reg)	3	None
Regeneration natural gas-fired heater rated at 5.14×10^6 Btu/hr [HE-15.07]	4 (Reg)	22	None
Hot oil natural gas-fired heater rated at 43.75×10^6 Btu/hr [H-401](1981)	1 (Hot oil)	4A, 4B	None
Hot oil natural gas-fired heater rated at 43.75×10^6 Btu/hr [H-405](1981)	2 (Hot oil)	5	None
Hot oil natural gas-fired heater rated at 45.8×10^6 Btu/hr [HE-3800](2007, Dc)	4 (Hot oil)	21	None
Auxiliary steam natural gas-fired boiler rated at 21.0×10^6 Btu/hr [BO-402] (pre-1989)	1 (Auxiliary)	7	None
Auxiliary steam natural gas-fired boiler rated at 21.0×10^6 Btu/hr [BO-403] (pre-1989)	2 (Auxiliary)	8	None
Inert gas natural gas-fired generator (boiler) rated at 17.75×10^6 Btu/hr [BO-701] (pre-1989)	1 (Inert)	9	None
Inert gas natural gas-fired generator (boiler) rated at 17.75×10^6 Btu/hr [BO-702] (pre-1989)	2 (Inert)	10	None
Caterpillar G-399NA (4SRB) natural gas-fired emergency generator engine rated at 800 bhp (pre-2007)	1 (Gen) ^A	11	None
Acid gas/process/emergency flare (130 ft)	1 (Flare)	13	None
Bulk engine oil tank with a capacity of 300 barrels	1 (Oil) ^B	14	None
Amine (DEA) tank with a capacity of 250 barrels	1 (DEA) ^B	16	None
FUGOOOO	FUGOOOO (Subject to NSPS OOOO)	Fugitive VOC	LDAR Program
FUGKKK	FUGKKK (Subject to NSPS KKK)	Fugitive VOC	LDAR Program
FUG	FUG (exempt from NSPS KKK)	Fugitive VOC	None

Emission Unit Description	Emission Unit (EU)	Emission Point (EP)	Air Pollution Control Equipment
TEG dehydrator: 1. Regenerator vent	2 (Dehy)	1. 4A & 4B	1. Heater (1 Hot Oil)
2. Flash tank vent		2. ^C	2. ^C
Glycol natural/inlet gas-fired reconcentrator rated at 0.94×10^6 Btu/hr [H-7801]	2 (Glycol)	17	None
Steam natural gas-fired boiler 1 rated at 28.75×10^6 Btu/hr [H-602] (pre-1989)	1 (Boiler)	18	None
Methanol storage tank with a capacity of 200 barrels with 6 injection points	1 (Methanol) ^B	0	None
Truck loading of produced water at approximately 2.0 MM gallons/year	PW (Loading) ^B	Fugitive	None
Truck loading of purity products at approximately 81.0 MM gallons/year	PP (Loading) ^B	Fugitive	Pressurized Loading
Amine gas sweetening unit	Amine gas sweetening unit	^D	Acid Gas Injection Well or Flare

^A The potential to emit for an emergency stationary reciprocating internal combustion engine (RICE) is based on operating no more hours per year than is allowed by the applicable subpart (40 CFR 63, Subpart ZZZZ) except for emergency situations. For engines to be considered emergency stationary RICE under the RICE rules, engine operations must comply with non-emergency operating hour limits as specified in the applicable subpart. There is no limit on the use of an emergency stationary RICE in emergency situations [40 CFR 63, Subpart ZZZZ, §63.6640(f)].

^B Insignificant or fugitive emission source (no specific emission limit)

^C The flash tank vent EU 2 (Dehy) is routed to the plant inlet gas stream for reprocessing. Emissions are controlled through recirculation rather than a dedicated control device.

^D Acid gas from the amine gas sweetening unit is directed to the acid gas injection well. In the event of maintenance or a malfunction, the acid gas will be directed to the flare, EU 1 (Flare).

2. Restrictions:

A. Fuel Restriction: All emission units except 1 (Flare), 1 (Hot oil) and 2 (Glycol) shall be operated using only gaseous fuel containing no more than 2.0 grains of sulfur per 100 standard cubic feet. This fuel restriction ensures compliance with NDAC 33-15-06-01.2.

Applicable Requirements: Permit to Construct (PTC) 07021/Rev. 1 & NDAC 33-15-14-06.5.b(1)

B. Flaring Restrictions:

- 1) Flaring may not be used to burn waste gas for the purpose of increasing or maintaining well production without prior approval from this Department. When it is necessary to operate the flare during an emergency, malfunction or maintenance, all precautions shall be taken to minimize emissions and maintain compliance with the applicable ambient air quality standards as outlined in NDAC 33-15-02 and the opacity standard of 20% not to exceed 60% for more than one six-minute period per hour.
- 2) The stack height for the flare shall be at least 130 feet above ground level.
- 3) Processing equipment at the facility shall be operated in such a manner to minimize flaring as much as possible. Operations at the facility must be in accordance with the application for permit revision dated April 11, 2002, which specifies the following:
 - a) Acid gas injection replaces the sulfur recovery unit.
 - b) Operation of the CEM has ceased.
- 4) Flaring may also be used for maintenance and combustion of normal processes including:
 - a) Maintenance on the acid gas injection compressors and miscellaneous maintenance related blowdowns.
 - b) Combustion of the TEG flash gas.
 - c) Combustion of residue purge gas.
 - d) Daily backwashing of the amine filter into the backwash accumulator and then to the flare.
 - e) Potential equipment leaks from relief valves in the closed position that are routed to the flare.
 - f) Maintenance of the acid gas injection well is required approximately every two to three years. During such maintenance, the permittee will reduce the flow of high H₂S gas to the plant if necessary to remain within the SO₂ lb/hr emission limit for the flare. To the extent practicable, this maintenance will be planned to occur during planned plant shutdowns, if any, to minimize emissions.
- 5) The backup acid gas compressor will be maintained to help ensure its reliability when needed. The permittee will maintain an inventory of spare parts for compressor maintenance to minimize emissions during compressor malfunctions.

Applicable Requirements: NDAC 33-15-14-06.5.b(1) & PTC07021/Rev. 1

- C. The TEG dehydration unit [2 (Dehy)] still vent vapors are routed to EU 1 (Hot oil) to be used as fuel and the flash tank vapors shall be routed to the plant inlet gas stream for reprocessing.

Applicable Requirements: NDAC 33-15-14-06.5.a(3)(a) & NDAC 33-15-14-06.5.b(1)

3. **Standards and Miscellaneous Requirements:** The permittee shall comply with all applicable requirements of the following as incorporated into NDAC 33-15-12-02 (New Source Performance Standards) and NDAC 33-15-22-03 (National Emission Standards for Hazardous Air Pollutants):

- A. 40 CFR 60, Subpart A – General Provisions is applicable to any source unit subject to another 40 CFR 60 subpart.

Applicable Requirement: NDAC 33-15-12-02, Subpart A

- B. 40 CFR 63, Subpart A – General Provisions is applicable to any source unit subject to another 40 CFR 63 subpart.

Applicable Requirement: NDAC 33-15-22-03, Subpart A

- C. 40 CFR 60, Subpart KKK – Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants applies to EU FUGKKK.

Applicable Requirement: NDAC 33-15-12, Subpart KKK

- D. 40 CFR 60.18, General Control Device Requirements applies to EU 1 (Flare) due to FUGKKK component potential leak emissions that are directed to EU 1 (flare).

Applicable Requirement: NDAC 33-15-12-02, Subpart KKK

- E. 40 CFR 60, Subpart Dc – Standards of Performance for Small Industrial Commercial-Institutional Steam Generating Units recordkeeping and reporting requirements apply to EU 4 (Hot Oil).

Applicable Requirement: NDAC 33-15-12-02, Subpart Dc

- F. 40 CFR 60, Subpart OOOO (Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution) and/or Subpart OOOOa (Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after September 18, 2015). Subpart OOOO applies to the Bakken Pipeline Transfer and may apply to the flare conveyance process unit (single continuous bleed natural gas-driven pneumatic controller) upstream of EU 1 (Flare) which was replaced by construction beginning September 9, 2011. Other process units may become subject to NSPS Subparts OOOO or OOOOa in the future if they are constructed, reconstructed or modified. The Department has not adopted these subparts. Please send all documentation to EPA at the following address:

U.S. EPA Region 8
1595 Wynkoop Street
Mail Code 8ENF – AT
Denver, CO 80202-1129

Applicable Requirements: 40 CFR 60, Subpart OOOO and Subpart OOOOa

- G. 40 CFR 63, Subpart HH – National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities applies to EU 2 (Dehy).

Applicable Requirement: NDAC 33-15-22-03, Subpart HH

- H. 40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines applies to EU (1 Gen). This engine is categorized as an emergency engine as defined in 40 CFR 63.6675. For engines to be considered emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, engine operations must comply with the hour limits specified in the applicable subpart. There is no time limit on the use of an emergency stationary RICE in emergency situations. The Department has not adopted the HAP area source provisions of this subpart. Please send all documentation to EPA at the address in Condition 3.F above.

Applicable Requirement: NDAC 33-15-22-03, Subpart ZZZZ

- I. Like-Kind Engine Replacement: This permit allows the permittee to replace the existing engine(s) with a like-kind engine. Replacement is subject to the following conditions.
- 1) The Department must be notified within 10 days after change-out and start up of the engine.
 - 2) The replacement engine shall operate in the same manner, provide no significant increase in throughput and have equal or less emissions than the engine it is replacing.
 - 3) The date of manufacture of the replacement engine must be included in the notification. The facility must comply with any applicable federal standards (e.g. NSPS, NESHAP, MACT) triggered by the replacement.
 - 4) Emission testing shall be conducted within 180 days after start-up of the new engine to determine the emission rates of NO_x and CO from the engine.

Applicable Requirement: NDAC 33-15-14-06.5.b(1)

4. **Emission Unit Limits:**

Emission Unit Description	EU	EP	Pollutant/ Parameter	Emission Limit	NDAC Applicable Requirement
Regeneration heater	1 (Reg)	1	Opacity	20% ^A	33-15-03-02
Regeneration heater	2 (Reg)	2	Opacity	20% ^A	33-15-03-02
Regeneration heater	3 (Reg)	3	Opacity	20% ^A	33-15-03-02
Regeneration heater	4 (Reg)	22	Opacity	20% ^A	33-15-03-02
Hot oil heater	1 (Hot oil)	4A, 4B	Opacity	20% ^A	33-15-03-02
Hot oil heater	2 (Hot oil)	5	Opacity	20% ^A	33-15-03-02

Emission Unit Description	EU	EP	Pollutant/Parameter	Emission Limit	NDAC Applicable Requirement
Hot oil heater	4 (Hot oil)	21	Opacity	20% ^A	33-15-03-02 & 33-15-12, Subpart Dc
Auxiliary steam boiler	1 (Auxiliary)	7	Opacity	20% ^A	33-15-03-02
Auxiliary steam boiler	2 (Auxiliary)	8	Opacity	20% ^A	33-15-03-02
Inert gas generator (boiler)	1 (Inert)	9	Opacity	20% ^A	33-15-03-02
Inert gas generator (boiler)	2 (Inert)	10	Opacity	20% ^A	33-15-03-02
Caterpillar emergency generator engine	1 (Gen)	11	Opacity	20% ^A	33-15-03-02
Acid gas/process/emergency flare	1 (Flare)	13	SO ₂ Opacity	14,730 lb/hr ^B (1-hr average) 20% ^C	33-15-06-01.2 33-15-03-02.1
FUGOOOO	FUGOOO (Subject to OOOO)	Fugitive VOC	Equipment Leaks of VOC	See Cond. 3	40 CFR 60, Subpart OOOO
FUGKKK	FUGKKK (Subject to KKK)	Fugitive VOC	Equipment Leaks of VOC	See Cond. 3	33-15-12 Subpart KKK
TEG dehydrator: 1. Regenerator vent 2. Flash tank vent	2 (Dehy)	1. 4A & 4B 2. Plant inlet	Benzene	<0.99 tpy [total for all 2 Dehy emission points]	33-15-14-06.5 & 33-15-22, Subpart HH
Glycol re-concentrator	2 (Glycol)	17	Opacity	20% ^A	33-15-03-02
Steam boiler 1	1 (Boiler)	18	Opacity	20% ^A	33-15-03-02

^A 40% opacity is permissible for not more than one six-minute period per hour.

^B The amount of sweet (residue) gas to be added when flaring acid gas is 5.0 times the acid gas volume.

^C 60% opacity is permissible for not more than one six-minute period per hour.

5. Monitoring Requirements and Conditions:

A. Requirements

1) Source unit monitoring requirements:

Emission Unit Description EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
Regeneration heater 1 (Reg)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Regeneration heater 2 (Reg)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Regeneration heater 3 (Reg)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Regeneration heater 4 (Reg)	Opacity	Recordkeeping	5.B.1	33-14-14-06.5.a(3)(a)
Hot oil heater 1 (Hot Oil)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Hot oil heater 2 (Hot Oil)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Hot oil heater 4 (Hot oil)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a) & 33-15-12, Subpart Dc
Auxiliary steam boiler 1 (Auxiliary)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Auxiliary steam boiler 2 (Auxiliary)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Inert gas generator (boiler) 1 (Inert)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Inert gas generator (boiler) 2 (Inert)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Caterpillar emergency generator engine 1 (Gen)	Opacity Hours	Recordkeeping Recordkeeping	5.B.1 5.B.5 & 5.B.6	33-15-14-06.5.a(3)(a) 33-15-22-03, Subpart ZZZZ & 33-15-14-06.5.a(3)(a)
Acid gas/process/emergency flare 1 (Flare)	SO ₂	H ₂ S Content and Amount of Gas Flared	5.B.2	33-15-14-06.5.a(3)(a)
	Opacity	Visible Emissions Evaluation	5.B.2	33-15-14-06.5.a(3)(a)
TEG dehydrator: 1. Regenerator vent 2. Flash tank vent 2 (Dehy)	Benzene	Recordkeeping	2.C & 5.B.3	33-15-14-06.5.a(3)(a) & 33-15-22, Subpart HH
Glycol re-concentrator 2 (Glycol)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a) & 33-15-22, Subpart HH

Emission Unit Description EU	Pollutant/ Parameter	Monitoring Requirement (Method)	Condition Number	NDAC Applicable Requirement
FUGOOOO	VOC	LDAR Program	3.A & F	40 CFR 60, Subpart OOOO
FUGKKK	VOC	LDAR Program	3.A & C	33-15-12, Subpart KKK
Steam boiler 1 1 (Boiler)	Opacity	Recordkeeping	5.B.1	33-15-14-06.5.a(3)(a)
Facility-wide annual emissions	SO ₂	Recordkeeping	5.B.4	PTC07021

- 2) Ambient Air Monitoring Requirements: An ambient air quality and meteorological monitoring program shall be operated and maintained in accordance with provisions specified by this Department and the May 10, 1979 Federal Register (40 CFR 58) as amended. The program shall be used to determine the ambient concentrations of designated pollutants in the vicinity of the plant site and to verify compliance with the North Dakota Ambient Air Quality Standards. The Department, at its discretion, may from time-to-time audit the performance of ambient air and meteorological monitoring equipment.

Applicable Requirement: NDAC 33-15-14-06.5.a(3)(a)

B. Monitoring Conditions

- 1) For purposes of compliance monitoring, burning of gaseous fuel as outlined in Condition 2, shall be considered credible evidence of compliance with any applicable opacity, particulate and SO₂ emission limit. However, results from tests conducted in accordance with the test methods in 40 CFR 50, 51, 60, 61, or 75 will take precedence over burning of gaseous fuel as outlined in Condition 2, for evidence of compliance or noncompliance with any applicable opacity, particulate and SO₂ emission limit, in the event of enforcement action.
- 2) Flaring
 - a) The presence of a flame shall be monitored using a thermocouple or any other equivalent device approved by the Department.
 - b) During each occurrence of acid gas flaring, the permittee shall calculate and record the SO₂ emission rate (lb/hr) based on the H₂S content and amount of acid gas flared, and record the amount of fuel gas added. Emissions from emergency flaring will be differentiated from other flaring (process, scheduled maintenance, etc.) when reported on the Annual Emission Inventory Report.
 - c) If the flaring lasts longer than 24 hours, the permittee shall conduct a formal visible emissions evaluation of the flare to determine if the emissions are in compliance with the applicable opacity standard. Opacity readings shall consist

of three consecutive six-minute periods per day of flaring using EPA Reference Method 9 and conducted by a certified visible emissions reader.

- 3) Benzene emissions from the TEG dehydration unit [2 (Dehy)] still vent and flash tank shall be determined at least annually using average glycol circulation rate, average gas process rate, and GRI-GLYCalc emissions model, Version 3.0 or higher. In accordance with 40 CFR Part 63 for area sources of HAP, records of benzene emissions shall be kept to demonstrate exemption from MACT control requirements.
- 4) The permittee shall calculate and record for each calendar year annual emissions of SO₂ from the facility for a period of 10 years (2008-2017). Beginning with calendar year 2008, if annual emissions of SO₂ in tons/year exceed the baseline actual emissions by more than 40 tons/year, then the permittee shall submit a report to the Department within 60 days after the end of the calendar year. The report shall contain the following: a) the name, address and telephone number of the facility; b) the calculated annual SO₂ emissions; and c) any other information that the permittee wishes to include in the report (e.g., an explanation as to why the emissions differ from the preconstruction projection, exclusion of demand growth, etc.).
- 5) A non-resettable hours meter shall be installed on the emergency engine to ensure maintenance requirements are being performed as required per 40 CFR 63, Subpart ZZZZ. Maintenance requirements include but may not be limited to: change oil and filter or analyze oil every 500 hours of operation or annually; inspect spark plugs every 1,000 hours of operation or annually; and inspect hoses and belts every 500 hours of operation or annually whichever comes first, and replace as necessary.
- 6) A log shall be kept of the operating hours and reason (emergency vs. non-emergency) for operation of the emergency engine [1 (Gen)].

6. Recordkeeping Requirements:

- A. The permittee shall maintain compliance monitoring records as outlined in the Monitoring Records Table that include the following information.
 - 1) The date, place (as defined in the permit) and time of sampling or measurement.
 - 2) The date(s) testing was performed.
 - 3) The company, entity, or person that performed the testing.
 - 4) The testing techniques or methods used.
 - 5) The results of such testing.
 - 6) The operating conditions as existing at the time of the sampling or measurement.

Applicable Requirement: NDAC 33-15-14-06.5.a.(3)(b)[1]

Monitoring Records Table

Emission Unit Description EU	Pollutant/ Parameter	Compliance Monitoring Record
Regeneration heater 1 (Reg)	Opacity	Type of Fuel Usage
Regeneration heater 2 (Reg)	Opacity	Type of Fuel Usage
Regeneration heater 3 (Reg)	Opacity	Type of Fuel Usage
Regeneration heat 4 (Reg)	Opacity	Type of Fuel Usage
Hot oil heater 1 (Hot Oil)	Opacity	Type of Fuel Usage
Hot oil heater 2 (Hot Oil)	Opacity	Type of Fuel Usage
Hot oil heater 4 (Hot oil)	Opacity	Type of Fuel Usage and rating of heater per NDAC 33-15-12, Subpart Dc
Auxiliary steam boiler 1 (Auxiliary)	Opacity	Type of Fuel Usage
Auxiliary steam boiler 2 (Auxiliary)	Opacity	Type of Fuel Usage
Inert gas generator (boiler) 1 (Inert)	Opacity	Type of Fuel Usage
Inert gas generator (boiler) 2 (Inert)	Opacity	Type of Fuel Usage
Caterpillar emergency generator engine 1 (Gen)	Opacity Hours	Type of Fuel Usage Hours Record
Acid gas/process/emergency flare 1 (Flare)	SO ₂ Opacity	H ₂ S Content and Amount of Acid Gas Flared Visible Emissions Evaluation Readings
TEG dehydrator: 2 (Dehy) 1. Regenerator vent 2. Flash tank vent	Benzene	Benzene Emissions and Calculations
Glycol re-concentrator 2 (Glycol)	Opacity	Type of Fuel Usage
FUGOOOO	LDAR Records	LDAR Records
FUGKKK	LDAR Records	LDAR Records
Steam boiler 1 1 (Boiler)	Opacity	Type of Fuel Usage
Facility-wide annual emissions	SO ₂	SO ₂ Emissions and Calculations

- B. The permittee shall retain records of all required compliance monitoring data and support information for a period of at least five years from the date of the compliance monitoring sampling, measurement, report, or application. Support information includes all maintenance records and all original strip-chart recordings/computer printouts and calibrations of the continuous compliance monitoring instrumentation, and copies of all reports required by the permit.

Applicable Requirement: NDAC 33-15-14-06.5.a(3)(b)[2]

7. Reporting:

- A. The permittee shall submit a semi-annual monitoring report for all monitoring records required under Condition 6 on forms supplied or approved by the Department. All instances of deviations from the permit must be identified in the report. A monitoring report shall be submitted within 45 days after June 30 and December 31 of each year.

The semi-annual monitoring report shall also include the following information regarding each acid gas flaring incident:

- 1) Reason for flaring of acid gas.
- 2) Date and length of time that acid gas flaring occurred.
- 3) Amount of acid gas flared (ft³) and H₂S content.
- 4) Calculated average SO₂ lb/hr.

Applicable Requirements: NDAC 33-15-14-06.5.a(3)(c)[1] and [2]

- B. The permittee shall submit an annual compliance certification report within 45 days after December 31 of each year on forms supplied or approved by the Department.

Applicable Requirement: NDAC 33-15-14-06.5.c(5)

- C. For emission units where the method of compliance monitoring is demonstrated by either an EPA Test Method or a portable analyzer test, the test report shall be submitted to the Department within 60 days after completion of the test.

Applicable Requirement: NDAC 33-15-14-06.5.a(6)(e)

- D. The permittee shall submit an annual emission inventory report on forms supplied or approved by the Department. This report shall be submitted by March 15 of each calendar year. Insignificant units/activities listed in this permit do not need to be included in the report. Include the facility-wide annual SO₂ emissions and calculations.

Applicable Requirements: NDAC 33-15-14-06.5.a(7), NDAC 33-15-23-04 and PTC07021

- E. For FUGKKK the permittee shall comply with the applicable requirements of 40 CFR 60, Subpart KKK, Section 60.636, Recordkeeping and the applicable requirements of 40 CFR 60, Subpart A, Section 60.7, Notification and Recordkeeping.

Applicable Requirement: NDAC 33-15-12 and 40 CFR 60, Subpart KKK

- F. The ambient air quality monitoring data and quality assurance reports must be submitted to the Department in an electronic format within 45 days of the end of the calendar quarter and must contain the following information either in the body of the report or the cover letter:

- 1) A list of the highest and second-highest concentrations for each parameter and a list of all values exceeding State and Federal ambient air quality standards. The lists shall contain the date, time, wind speed and wind direction for each of the above entries for each site.
- 2) An explanation for each exceedance of the air quality standard. If there are no exceedances, a statement should be made to that effect.
- 3) A brief discussion of instrument malfunctions or significant problems that occurred during the quarter, and a summary of the corrective actions taken (to include locations and times).
- 4) A summary of the calibrations and zero/span checks conducted for each parameter at each site. For the calibrations, include the slopes, intercepts, and correlation coefficients of the least-squares linear regressions.
- 5) A computation of data recovery for each parameter at each site on a monthly basis for the quarter expressed in percentages (actual versus possible). Each parameter at each site is expected to maintain a minimum monthly data recovery rate of 80%. The reasons for failing to meet this requirement must be clearly explained.
- 6) A list of precision checks conducted during the quarter including dates, known concentrations, measured concentrations, individual percentage differences, quarterly average percentage differences, standard deviation and 95% probability limits (Reference: 40 CFR 58).
- 7) A report of the performance audits conducted during the quarter including known and measured concentrations and individual percentage differences. Also include slope, intercept, and the correlation coefficient of the audit line and the percent difference (full scale).
- 8) A hard copy tabular printout of the data is not required as a part of the quarterly data report. However, a copy should be available to verify the electronically submitted data.

- 9) The quarterly data for each parameter and each site must accompany the report and must be in the format specified by the Department.

Applicable Requirement: NDAC 33-15-14-06.5.a(3)(a)

8. **Facility Wide Operating Conditions:**

A. **Ambient Air Quality Standards:**

- 1) Particulate and gases. The permittee shall not emit air contaminants in such a manner or amount that would violate the standards of ambient air quality listed in Table 1 of NDAC 33-15-02.
- 2) Radioactive substances. The permittee shall not release into the ambient air any radioactive substances exceeding the concentrations specified in NDAC 33-10.
- 3) Other air contaminants. The permittee shall not emit any other air contaminants in concentrations that would be injurious to human health or well-being or unreasonably interfere with the enjoyment of property or that would injure plant or animal life.
- 4) Disclaimer. Nothing in any other part or section of this permit may in any manner be construed as authorizing or legalizing the emission of air contaminants in such manner that would violate the standards in Paragraphs 1), 2) and 3) of this condition.

Applicable Requirement: NDAC 33-15-02-04

- B. **Fugitive Emissions:** The release of fugitive emissions shall comply with the applicable requirements in NDAC 33-15-17.

Applicable Requirement: NDAC 33-15-17

- C. **Open Burning:** The permittee may not cause, conduct, or permit open burning of refuse, trade waste, or other combustible material, except as provided for in section 33-15-04-02 and may not conduct, cause, or permit the conduct of a salvage operation by open burning. Any permissible open burning under NDAC 33-15-04-02 must comply with the requirements of that section.

Applicable Requirement: NDAC 33-15-04

- D. **Asbestos Renovation or Demolition:** Any asbestos renovation or demolition at the facility shall comply with emission standard for asbestos in NDAC 33-15-13.

Applicable Requirement: NDAC 33-15-13-02

E. Requirements for Organic Compounds Gas Disposal:

- 1) The owner/operator shall incinerate, flare or treat in an equally effective manner any organic compounds, gases and vapors which are generated as wastes as the result of storage, refining, or process operations and which contain hydrogen sulfide before being released to the ambient air.
- 2) Each flare must be equipped and operated with an automatic ignitor or a continuous burning pilot.

Applicable Requirement: NDAC 33-15-07-02

F. Rotating Pumps and Compressors: All rotating pumps and compressors handling volatile organic compounds must be equipped and operated with properly maintained seals designed for their specific product service and operating conditions.

Applicable Requirement: NDAC 33-15-07-01.5

G. Shutdowns/Malfunction/Continuous Emission Monitoring System Failure:

- 1) Maintenance Shutdowns. In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shut down such equipment shall be reported to the Department at least twenty-four hours prior to the planned shutdown provided that the air contaminating source will be operated while the control equipment is not in service. Such prior notice shall include the following:
 - a) Identification of the specific facility to be taken out of service as well as its location and permit number.
 - b) The expected length of time that the air pollution control equipment will be out of service.
 - c) The nature and estimated quantity of emissions of air pollutants likely to be emitted during the shutdown period.
 - d) Measures, such as the use of off-shift labor and equipment, that will be taken to minimize the length of the shutdown period.
 - e) The reasons that it would be impossible or impractical to shutdown the source operation during the maintenance period.
 - f) Nothing in this subsection shall in any manner be construed as authorizing or legalizing the emission of air contaminants in excess of the rate allowed by this article or a permit issued pursuant to this article.

Applicable Requirement: NDAC 33-15-01-13.1

2) Malfunctions.

- a) When a malfunction in any installation occurs that can be expected to last longer than twenty-four hours and cause the emission of air contaminants in violation of this article or other applicable rules and regulations, the person responsible for such installation shall notify the Department of such malfunction as soon as possible during normal working hours. The notification must contain a statement giving all pertinent facts, including the estimated duration of the breakdown. The Department shall be notified when the condition causing the malfunction has been corrected.
- b) Immediate notification to the Department is required for any malfunction that would threaten health or welfare, or pose an imminent danger. During normal working hours the Department can be contacted at 701-328-5188. After hours the Department can be contacted through the twenty-four-hour state radio emergency number 1-800-472-2121. If calling from out of state, the twenty-four-hour number is 701-328-9921.
- c) Unavoidable Malfunction. The owner or operator of a source who believes any excess emissions resulted from an unavoidable malfunction shall submit a written report to the Department which includes evidence that:
 - [1] The excess emissions were caused by a sudden, unavoidable breakdown of technology that was beyond the reasonable control of the owner or operator.
 - [2] The excess emissions could not have been avoided by better operation and maintenance, did not stem from an activity or event that could have been foreseen and avoided, or planned for.
 - [3] To the extent practicable, the source maintained and operated the air pollution control equipment and process equipment in a manner consistent with good practice for minimizing emissions, including minimizing any bypass emissions.
 - [4] Any necessary repairs were made as quickly as practicable, using off-shift labor and overtime as needed and possible.
 - [5] All practicable steps were taken to minimize the potential impact of the excess emissions on ambient air quality.
 - [6] The excess emissions are not part of a recurring pattern that may have been caused by inadequate operation or maintenance, or inadequate design of the malfunctioning equipment.

The report shall be submitted within thirty days of the end of the calendar quarter in which the malfunction occurred or within thirty days of a written request by the Department, whichever is sooner.

The burden of proof is on the owner or operator of the source to provide sufficient information to demonstrate that an unavoidable equipment malfunction occurred. The Department may elect not to pursue enforcement action after considering whether excess emissions resulted from an unavoidable equipment malfunction. The Department will evaluate, on a case-by-case basis, the information submitted by the owner or operator to determine whether to pursue enforcement action.

Applicable Requirement: NDAC 33-15-01-13.2

- 3) Continuous Emission Monitoring System Failures. When a failure of a continuous emission monitoring system occurs, an alternative method for measuring or estimating emissions must be undertaken as soon as possible. The owner or operator of a source that uses an alternative method shall have the burden of demonstrating that the method is accurate. Timely repair of the emission monitoring system must be made. The provisions of this subsection do not apply to sources that are subject to monitoring requirements in Chapter 33-15-21 (40 CFR 75, Acid Rain Program).

Applicable Requirement: NDAC 33-15-01-13.3

H. **Noncompliance Due to an Emergency:** The permittee may seek to establish that noncompliance with a technology-based emission limitation under this permit was due to an emergency. To do so, the permittee shall demonstrate the affirmative defense of emergency through properly signed, contemporaneous operating logs, or other relevant evidence that:

- 1) An emergency occurred and that the permittee can identify the cause(s) of the emergency;
- 2) The permitted facility was at the time being properly operated;
- 3) During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards, or other requirements in this permit; and
- 4) The permittee submitted notice of the emergency to the Department within one working day of the time when emission limitations were exceeded longer than 24-hours due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. Those emergencies not reported within one working day, as well as those that were, will be included in the semi-annual report.
- 5) In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

- a) Technology-based emission limits are those established on the basis of emission reductions achievable with various control measures or process changes (e.g., a New Source Performance Standard) rather than those established to attain a health based air quality standard.
- b) An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of this source, including acts of God, which requires immediate corrective action to restore normal operation, and that causes this source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

Applicable Requirement: NDAC 33-15-14-06.5.g

- I. **Air Pollution from Internal Combustion Engines:** The permittee shall comply with all applicable requirements of NDAC 33-15-08-01 – Internal Combustion Engine Emissions Restricted.

Applicable Requirement: NDAC 33-15-08-01

- J. **Prohibition of Air Pollution:**

- 1) The permittee shall not permit or cause air pollution, as defined in NDAC 33-15-01-04.
- 2) Nothing in any other part of this permit or any other regulation relating to air pollution shall in any manner be construed as authorizing or legalizing the creation or maintenance of air pollution.

Applicable Requirement: NDAC 33-15-01-15

- K. **Performance Tests:**

- 1) The Department may reasonably require the permittee to make or have made tests, at a reasonable time or interval, to determine the emission of air contaminants from any source, for the purpose of determining whether the permittee is in violation of any standard or to satisfy other requirements of NDCC 23-25. All tests shall be made and the results calculated in accordance with test procedures approved or specified by the Department including the North Dakota Department of Health Emission Testing Guideline. All tests shall be conducted by reputable, qualified personnel. The Department shall be given a copy of the test results in writing and signed by the person responsible for the tests.

- 2) The Department may conduct tests of emissions of air contaminants from any source. Upon request of the Department, the permittee shall provide necessary holes in stacks or ducts and such other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices, as may be necessary for proper determination of the emission of air contaminants.

Applicable Requirement: NDAC 33-15-01-12

- 3) Except for sources subject to 40 CFR 63, the permittee shall notify the Department by submitting a Proposed Test Plan, or its equivalent, at least 30 calendar days in advance of any tests of emissions of air contaminants required by the Department. The permittee shall notify the Department at least 60 calendar days in advance of any performance testing required under 40 CFR 63. If the permittee is unable to conduct the performance test on the scheduled date, the permittee shall notify the Department as soon as practicable when conditions warrant, and shall coordinate a new test date with the Department.

Failure to give the proper notification may prevent the Department from observing the test. If the Department is unable to observe the test because of improper notification, the test results may be rejected.

Applicable Requirements: NDAC 33-15-14-06.5.a(3)(a), NDAC 33-15-12-02 Subpart A (40 CFR 60.8), NDAC 33-15-13-01.2 Subpart A (40 CFR 61.13), NDAC 33-15-22-03 Subpart A (40 CFR 63.7)

- L. **Pesticide Use and Disposal:** Any use of a pesticide or disposal of surplus pesticides and empty pesticide containers shall comply with the requirements in NDAC 33-15-10.

Applicable Requirements: NDAC 33-15-10-01 and NDAC 33-15-10-02

- M. **Air Pollution Emergency Episodes:** When an air pollution emergency episode is declared by the Department, the permittee shall comply with the requirements in NDAC 33-15-11.

Applicable Requirements: NDAC 33-15-11-01 through NDAC 33-15-11-04

- N. **Stratospheric Ozone Protection:** The permittee shall comply with any applicable standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for MVACs in Subpart B:

- 1) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to Section 82.156.
- 2) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to Section 82.158.

- 3) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to Section 82.161.
- 4) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to Section 82.156.

Applicable Requirement: 40 CFR 82

- O. **Chemical Accident Prevention:** The permittee shall comply with all applicable requirements of Chemical Accident Prevention pursuant to 40 CFR 68. The permittee shall comply with the requirements of this part no later than the latest of the following dates:

- 1) Three years after the date on which a regulated substance is first listed under this part; or
- 2) The date on which a regulated substance is first present above a threshold quantity in a process.

Applicable Requirement: 40 CFR 68

- P. **Air Pollution Control Equipment:** The permittee shall maintain and operate air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. The manufacturer's recommended Operations and Maintenance (O&M) procedures, or a site-specific O&M procedure developed from the manufacturer's recommended O&M procedures, shall be followed to assure proper operation and maintenance of the equipment. The permittee shall have the O&M procedures available onsite and provide the Department with a copy when requested.

Applicable Requirement: NDAC 33-15-14-06.5.b(1)

- Q. **Prevention of Significant Deterioration of Air Quality (40 CFR 52.21 as incorporated by NDAC Chapter 33-15-15):** If this facility is classified as a major stationary source under the Prevention of Significant Deterioration of Air Quality (PSD) rules, a Permit to Construct must be obtained from the Department for any project which meets the definition of a "major modification" under 40 CFR 52.21(b)(2).

If this facility is classified as a major stationary source under the PSD rules and the permittee elects to use the method specified in 40 CFR 52.21(b)(41)(ii)(a) through (c) for calculating the projected actual emissions of a proposed project, then the permittee shall comply with all applicable requirements of 40 CFR 52.21(r)(6).

Applicable Requirement: NDAC 33-15-15-01.2

9. **General Conditions:**

- A. **Annual Fee Payment:** The permittee shall pay an annual fee, for administering and monitoring compliance, which is determined by the actual annual emissions of regulated contaminants from

the previous calendar year. The Department will send a notice, identifying the amount of the annual permit fee, to the permittee of each affected installation. The fee is due within sixty days following the date of such notice. Any source that qualifies as a "small business" may petition the Department to reduce or exempt any fee required under this section. Failure to pay the fee in a timely manner or submit a certification for exemption may cause this Department to initiate action to revoke the permit.

Applicable Requirements: NDAC 33-15-14-06.5.a(7) and NDAC 33-15-23-04

- B. **Permit Renewal and Expiration:** This permit shall be effective from the date of its issuance for a fixed period of 5 years. The permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least six months, but no more than eighteen months, prior to the date of permit expiration. The Department shall approve or disapprove the renewal application within sixty days of receipt. Unless the Department requests additional information or otherwise notifies the applicant of incompleteness, the application shall be deemed complete. For timely and complete renewal applications for which the Department has failed to issue or deny the renewal permit before the expiration date of the previous permit, all terms and conditions of the permit, including any permit shield previously granted shall remain in effect until the renewal permit has been issued or denied. The application for renewal shall include the current permit number, description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

Applicable Requirements: NDAC 33-15-14-06.4 and NDAC 33-15-14-06.6

- C. **Transfer of Ownership or Operation:** This permit may not be transferred except by procedures allowed in Chapter 33-15-14 and is to be returned to the Department upon the destruction or change of ownership of the source unit(s), or upon expiration, suspension or revocation of this permit. A change in ownership or operational control of a source is treated as an administrative permit amendment if no other change in the permit is necessary and provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittee has been submitted to the Department.

Applicable Requirement: NDAC 33-15-14-06.6.d

- D. **Property Rights:** This permit does not convey any property rights of any sort, or any exclusive privilege.

Applicable Requirement: NDAC 33-15-14-06.5.a(6)(d)

- E. **Submissions:**

- 1) Reports, test data, monitoring data, notifications, and requests for renewal shall be submitted to:

North Dakota Department of Health
Division of Air Quality
918 E Divide Avenue, 2nd Floor
Bismarck, ND 58501-1947

- 2) Any document submitted shall be certified as being true, accurate, and complete by a responsible official.

Applicable Requirement: NDAC 33-15-14-06.4.d

- F. **Right of Entry:** Any duly authorized officer, employee or agent of the North Dakota Department of Health may enter and inspect any property, premise or place listed on this permit or where records are kept concerning this permit at any reasonable time for the purpose of ascertaining the state of compliance with this permit and the North Dakota Air Pollution Control Rules. The Department may conduct tests and take samples of air contaminants, fuel, processing material, and other materials which affect or may affect emissions of air contaminants from any source. The Department shall have the right to access and copy any records required by the Department's rules and to inspect monitoring equipment located on the premises.

Applicable Requirements: NDAC 33-15-14-06.5.c(2) and NDAC 33-15-01-06

- G. **Compliance:** The permittee must comply with all conditions of this permit. Any noncompliance with a federally-enforceable permit condition constitutes a violation of the Federal Clean Air Act. Any noncompliance with any State enforceable condition of this permit constitutes a violation of NDCC Chapter 23-25 and NDAC 33-15. Violation of any condition of this permit is grounds for enforcement action, for permit termination, revocation and reissuance or modification, or for denial of a permit renewal application. Noncompliance may also be grounds for assessment of penalties under the NDCC 23-25. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

Applicable Requirements: NDAC 33-15-14-06.5.a(6)(a) and NDAC 33-15-14-06.5.a(6)(b)

- H. **Duty to Provide Information:** The permittee shall furnish to the Department, within a reasonable time, any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or to determine compliance with the permit. This includes instances where an alteration, repair, expansion, or change in method of operation of the source occurs. Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such recourse directly to the Department along with a claim of confidentiality. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information. Items that warrant supplemental information submittal include, but are not limited to, changes in the ambient air boundary and changes in parameters associated with emission points (i.e., stack parameters). The permittee shall also provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

Applicable Requirements: NDAC 33-15-14-06.5.a(6)(e), NDAC 33-15-14-06.6.b(3) and NDAC 33-15-14-06.4.b

I. **Reopening for Cause:** The Department will reopen and revise this permit as necessary to remedy deficiencies in the following circumstances:

- 1) Additional applicable requirements under the Federal Clean Air Act become applicable to the permittee with a remaining permit term of three or more years. Such a reopening shall be completed not later than eighteen months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the expiration date of this permit.
- 2) The Department or the United States Environmental Protection Agency determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
- 3) The Department or the United States Environmental Protection Agency determines that the permit must be revised or revoked to assure compliance with the applicable requirements.
- 4) Reopenings shall not be initiated before a notice of intent to reopen is provided to the permittee by the Department at least 30 days in advance of the date that this permit is to be reopened, except that the Department may provide a shorter time period in the case of an emergency. Proceedings to reopen and issue this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening shall be made as expeditiously as practicable.

Applicable Requirement: NDAC 33-15-14-06.6.f

J. **Permit Changes:** The permit may be modified, revoked, reopened, and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.

Applicable Requirement: NDAC 33-15-14-06.5.a(6)(c)

K. **Off-Permit Changes:** A permit revision is not required for changes that are not addressed or prohibited by this permit, provided the following conditions are met:

- 1) No such change may violate any term or condition of this permit.
- 2) Each change must comply with all applicable requirements.
- 3) Changes under this provision may not include changes or activities subject to any requirement under Title IV or that are modifications under any provision of Title I of the Federal Clean Air Act.

- 4) A Permit to Construct under NDAC 33-15-14-02 has been issued, if required.
- 5) Before the permit change is made, the permittee must provide written notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, except for changes that qualify as insignificant activities in Section 33-15-14-06. This notice shall describe each change, the date of the change, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result.
- 6) The permittee shall record all changes that result in emissions of any regulated air pollutant subject to any applicable requirement not otherwise regulated under this permit, and the emissions resulting from those changes. The record shall reside at the permittee's facility.

Applicable Requirement: NDAC 33-15-14-06.6.b(3)

L. **Administrative Permit Amendments:** This permit may be revised through an administrative permit amendment, if the revision to this permit accomplishes one of the following:

- 1) Corrects typographical errors.
- 2) Identifies a change in the name, address or phone number of any person identified in this permit, or provides a similar minor administrative change at the source.
- 3) Requires more frequent monitoring or reporting by the permittee.
- 4) Allows for a change in ownership or operational control of the source where the Department determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new permittee has been submitted to the Department.
- 5) Incorporates into the Title V permit the requirements from a Permit to Construct when the review was substantially equivalent to Title V requirements for permit issuance, renewal, reopenings, revisions and permit review by the United States Environmental Protection Agency and affected state review, that would be applicable to the change if it were subject to review as a permit modification and compliance requirements substantially equivalent to Title V requirements for permit content were contained in the Permit to Construct.
- 6) Incorporates any other type of change which the Administrator of the United States Environmental Protection Agency has approved as being an administrative permit amendment as part of the Department's approved Title V operating permit program.

Applicable Requirement: NDAC 33-15-14-06.6.d

M. **Minor Permit Modification:** This permit may be revised by a minor permit modification, if the proposed permit modification meets the following requirements:

- 1) Does not violate any applicable requirement.
- 2) Does not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in this permit.
- 3) Does not require or change a case-by-case determination of an emission limitation or other standard, or a source-specific determination for temporary sources of ambient impacts, or a visibility or increment analysis.
- 4) Does not seek to establish or change a permit term or condition for which there is no corresponding underlying applicable requirement and that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject. Such terms and conditions include a federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the Federal Clean Air Act; and alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the Federal Clean Air Act.
- 5) Are not modifications under NDAC 33-15-12, 33-15-13, and 33-15-15 or any provision of Title I of the Federal Clean Air Act.
- 6) Are not required to be processed as a significant modification.

Applicable Requirement: NDAC 33-15-14-06.6.e(1)

N. Significant Modifications:

- 1) Significant modification procedures shall be used for applications requesting permit modifications that do not qualify as minor permit modifications or as administrative amendments. Every significant change in existing monitoring permit terms or conditions and every relaxation of reporting or recordkeeping permit terms or conditions shall be considered significant. Nothing therein shall be construed to preclude the permittee from making changes consistent with this subsection that would render existing permit compliance terms and conditions irrelevant.
- 2) Significant permit modifications shall meet all Title V requirements, including those for applications, public participation, review by affected states, and review by the United States Environmental Protection Agency, as they apply to permit issuance and permit renewal. The Department shall complete review of significant permit modifications within nine months after receipt of a complete application.

Applicable Requirement: NDAC 33-15-14-06.6.e(3)

- O. Operational Flexibility:** The permittee is allowed to make a limited class of changes within the permitted facility that contravene the specific terms of this permit without applying for a permit revision, provided the changes do not exceed the emissions allowable under this permit, are not Title I modifications and a Permit to Construct is not required. This class of changes does not include changes that would violate applicable requirements; or changes to federally-enforceable permit terms or conditions that are monitoring, recordkeeping, reporting, or compliance certification requirements.

The permittee is required to send a notice to both the Department and Air Program (8P-AR), Office of Partnerships & Regulatory Assistance, US EPA Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129, at least seven days in advance of any change made under this provision. The notice must describe the change, when it will occur and any change in emissions, and identify any permit terms or conditions made inapplicable as a result of the change. The permittee shall attach each notice to its copy of this permit. Any permit shield provided in this permit does not apply to changes made under this provision.

Applicable Requirement: NDAC 33-15-14-06.6.b(2)

P. **Relationship to Other Requirements:** Nothing in this permit shall alter or affect the following:

- 1) The provisions of Section 303 of the Federal Clean Air Act (emergency orders), including the authority of the administrator of the United States Environmental Protection Agency under that section.
- 2) The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance.
- 3) The ability of the United States Environmental Protection Agency to obtain information from a source pursuant to Section 114 of the Federal Clean Air Act.
- 4) Nothing in this permit shall relieve the permittee of the requirement to obtain a Permit to Construct.

Applicable Requirements: NDAC 33-15-14-06.3 and NDAC 33-15-14-06.5.f(3)(a), (b) and (d)

Q. **Severability Clause:** The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

Applicable Requirement: NDAC 33-15-14-06.5.a(5)

R. **Circumvention:** The permittee shall not cause or permit the installation or use of any device of any means which conceals or dilutes an emission of air contaminants which would otherwise violate this permit.

Applicable Requirement: NDAC 33-15-01-08

10. **State Enforceable Only Conditions (not Federally enforceable):**

A. **General Odor Restriction:** The permittee shall not discharge into the ambient air any objectionable odorous air contaminant which exceeds the limits established in NDAC 33-15-16.

Applicable Requirement: NDAC 33-15-16

- B. **Hydrogen Sulfide Restriction:** The permittee shall not discharge into the ambient air hydrogen sulfide (H_2S) in concentrations that would be objectionable on land owned or leased by the complainant or in areas normally accessed by the general public. For the purpose of complaint resolution, two samples with concentrations greater than 0.05 parts per million (50 parts per billion) sampled at least 15 minutes apart within a two-hour period and measured in accordance with Section 33-15-16-04 constitute a violation.

Applicable Requirement: NDAC 33-15-16-04

DRAFT

ONEOK Rockies Midstream, L.L.C., Grasslands Gas Plant
Renewal No. 4, Revision No. 0 of
Title V Permit to Operate No. T5-O83005

Statement of Basis

(7/5/16)

Facility Background: The ONEOK Rockies Midstream, L.L.C. Grasslands Gas Plant is a 100 MMSCF/day natural gas processing facility that uses expansion refrigeration and compression to process gas from the surrounding fields into methane and ethane gas, propane and butane liquids and natural gasoline. The remaining acid gas is compressed and piped to a wellhead located approximately one quarter mile from the plant. The acid gas is then injected into the Dakota Formation located approximately 5,100 feet below the wellhead, which is equipped with H₂S leak detection sensors.

The facility consists of approximately 12 natural gas-fired heaters and boilers each with a nominal capacity of 46×10^6 Btu/hr heat input or less, an 800 bhp natural gas-fired emergency electrical generator engine, an acid gas/process/emergency flare and two liquid storage tanks with capacities of 300 barrels or less each that contain engine oil or amine. There is an amine unit and a 200 barrel methanol storage tank on site with approximately six injection points. There is also a triethylene glycol unit on site which dries residue gas.

The Koch Hydrocarbon Company, the original owner, applied for a permit to construct for the McKenzie County Gas Plant (now known as the Grasslands Gas Plant) on October 3, 1979. Prevention of Significant Deterioration and Best Available Control Technology were considered. An interim variance was issued November 19, 1979 and construction began. Construction was complete and operation of various parts of the plant began between September, 1980 and March, 1981.

Permit to Operate No. O83005 was first issued on September 30, 1983 and then renewed at three year intervals. The initial configuration of the facility included a sulfur recovery unit (SRU), a tail gas incinerator and an SO₂ continuous emission monitor. Several permits to construct were issued due to facility changes that were subsequently reflected by changes to the permit to operate.

Ownership of the facility was transferred from Koch Hydrocarbon to Bear Paw Energy, Inc. (later changed to L.L.C.) in January, 1997. On February 10, 1997, Permit to Operate T5-O83005 was first issued for the facility. That permit reflected the switch from the SRU/tail gas incinerator configuration to the deep well injection/emergency flare operation. The C4-Splitter was installed in 1997-1998 and is one of several process units that are subject to 40 CFR 60, Subpart KKK. T5-O83005 Renewal No. 1 was issued December 26, 2001. PTC07021, issued July 2, 2007, implemented steps toward increasing plant capacity to a nominal 100×10^6 scfd @ 3.0% H₂S. T5-O83005 Renewal No. 2 was issued July 24, 2007. Revision No. 1 to PTC07021 was issued 6/29/09 and added the regeneration heater, EU 4 (Reg). T5-O83005, Revision No. 1 (Minor Mod) was issued September 22, 2009, and it incorporated the conditions of PTC07021,

Rev. 1. In September of 2011, Bear Paw Energy, L.L.C. was renamed ONEOK Rockies Midstream, L.L.C.

Renewal No. 3 of T5-O83005 was issued February 8, 2012 and added the acid gas/process/emergency flare compliance plan and schedule. The compliance plan addressed replacing the acid gas/process/emergency flare to ensure compliance with 40 CFR 60.18 due to FUGKKK potential leak emissions that are directed to EU 1 (Flare). Revision No. 1 (Admin.) of Renewal No. 3 was issued May 20, 2015 and reflected the replacement of the acid gas/process/emergency flare and completion of the flare compliance plan.

Current Action: The Department received a timely permit application dated June 23, 2016 for renewal of T5-O83005 with supplemental information on August 30 and September 29, 2016. All of the changes in the draft renewal permit are administrative in nature. The Department proposes to issue Renewal No. 4 of the Title V permit after the required 30-day public comment period and subsequent 45-day EPA review period. This statement of basis summarizes the relevant information considered during the revision of the Title V permit. The legal basis for each permit condition is stated in the draft permit under the heading of “Applicable Requirement.”

Applicable Programs/As-Needed Topics:

1. **Title V.** The facility holds a Title V Permit to Operate because potential NO_x, CO and VOC emissions exceed the Title V threshold; and because the potential SO₂ emissions from flaring acid gas when problems prevent deep well injection may reasonably be considered above 100 tons per year (2015 actual SO₂—45 tpy). The plant is an area source of HAP emissions.
2. **New Source Performance Standards (NSPS).** The C4-Splitter is subject to NDAC 33-15-12 (40 CFR 60), Subpart KKK, Standards of Performance for Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, because it was constructed after January 20, 1984 (actual 1997-1998). An audit conducted by the operator found that other processes are subject to NSPS Subpart KKK as well. All fugitive emission sources that are subject to NSPS Subpart KKK are designated by FUGKKK in this permit.

NDAC 33-15-12 (40 CFR 60), Subpart Dc recordkeeping and reporting requirements apply to EU 4 (Hot oil).

40 CFR 60, Subpart OOOO – Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution may apply to the flare conveyance process unit (single continuous bleed natural gas-driven pneumatic controller) upstream of EU 1 (Flare) which was replaced by construction beginning September 9, 2011. 40 CFR 60, Subpart OOOOa – Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification or Reconstruction Commenced after September 18, 2015 may apply to process units that are constructed, reconstructed or modified in the future. The Department has not adopted these subparts.

3. **National Emission Standards for Hazardous Air Pollutants (NESHAP).** No NDAC 33-15-13 (40 CFR 61) subparts apply to the facility, with the following possible exception: NDAC 33-15-13-02 (40 CFR 61), Subpart M, National Emission Standard for Asbestos may apply during facility modifications involving asbestos.
4. **NESHAP (MACT).** NESHAP 40 CFR 63, Subpart HH, National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. This subpart applies to affected emission points that are located at facilities which are major or area sources of HAP and either process, upgrade, or store hydrocarbons prior to the point of custody transfer or prior to which the natural gas enters the natural gas transmission and storage source category. 40 CFR 63.765(a) states that the glycol dehydration unit process vent standard section applies to each glycol dehydration unit subject to the subpart with an actual annual average natural gas flow rate equal to or greater than 85,000 standard cubic meters per day and with actual average glycol dehydration unit process vent benzene emissions equal to or greater than 0.90 megagrams per year. Grasslands Gas Plant is an area source of HAPs with an actual annual average natural gas flow rate of greater than 85,000 standard cubic meters per day, but both glycol dehydration units are limited to emissions less than 0.90 megagrams per year (0.99 tpy) benzene. Therefore, the site is not subject to area source requirements of this subpart.

NESHAP 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE). This subpart affects existing, new, and reconstructed spark ignition 4-stroke rich-burn RICE, new and reconstructed spark ignition 2-stroke lean-burn RICE, new or reconstructed 4-stroke lean-burn RICE, and new or reconstructed compression ignition RICE, that are located at a major or area source of HAP emissions. Grasslands Gas Plant is an area source of HAPs. The emergency generator engine (EU 1 Gen) is subject to Subpart ZZZZ because it is an existing 4 stroke stationary RICE located at an area source. The Department has not adopted the HAP area source provisions of this subpart.
5. **Acid Rain.** NDAC 33-15-21 (40 CFR 72, 73, 75 and 76) does not apply to the facility since the it is not an existing electric utility steam generating plant rated at greater than 25 MWe.
6. **Prevention of Significant Deterioration (PSD).** The facility is not a major source under NDAC 33-15-15 (40 CFR 52) because it does not have the potential to emit more than 250 tons of any air contaminant during normal operations. SO₂ emissions may exceed 250 tons (>600 tons per year) during emergency flaring. There are no changes contained in this permit renewal that increase potential emissions by a PSD-significant amount. Therefore, this permit revision is not subject to PSD review.
7. **BACT.** Since there are no changes contained in this permit renewal that increase potential emissions by a PSD-significant amount, a BACT review is not required for this permit renewal.

8. **Gap Filling.** Although the permit does contain gap filling, testing, monitoring or recordkeeping not otherwise required by rule, this draft renewal permit does not contain revisions to previously permitted gap filling.
9. **Streamlining Decisions.** Not applicable because no streamlining was involved.
10. **Compliance Assurance Monitoring (CAM).** Does not apply because there is no add-on air pollution control equipment installed.
11. **Permit Shield.** The permit to operate does not contain a permit shield.
12. **New Conditions/Limits.** This draft permit renewal includes no new emission limits. New conditions reflect a new potentially applicable 40 CFR 60 subpart (OOOOa).
13. **40 CFR 98 -- Mandatory Greenhouse Gas Reporting.** This rule requires sources above certain emission thresholds to calculate, monitor, and report greenhouse gas emissions. According to the definition of "applicable requirement" in 40 CFR 70.2, neither Subpart 98, nor Clean Air Act Section 307(d)(1)(V), the CAA authority under which Subpart 98 was promulgated, are listed as applicable requirements for the purpose of title V permitting. Although the rule is not an applicable requirement under 40 CFR 70, the source is not relieved from the requirement to comply with the rule separately from compliance with their Part 70 operating permit. It is the responsibility of each source to determine applicability to the subpart and to comply, if necessary.

Permit Changes by Section in this Revision:

Note: Administrative changes were made to most sections to update to current North Dakota (ND) format and to correct administrative errors.

Cover: updated

Table of Contents: no change

1. **Emission Unit Identification:** The emission unit table superscripts were arranged so they appear in the correct alphabetical order and the table notes references were revised to address acid gas injection maintenance and to align allowable hours of emergency engine operation with the current applicable subparts.
2. **Restrictions:** Deleted "and amine sump lift gas" from 2.b.4)b) since it was also described in 2.b.4)d).
3. **Standards and Miscellaneous Requirements:** Condition 3.F was expanded to also address 40 CFR 60, OOOOa. In Conditions 3.F and 3.H, the ND standard text used when addressing subparts not adopted by the state was revised in accordance with a 2016 EPA Region 8 recommendation. EU 2 (Hot Oil) (pre-1989 construction, modification or reconstruction) and EU 4 (Reg) (less than the applicability size of 10 MMBtu/hr; actual is

5.14 MMBtu/hr) were determined not to be subject to the recordkeeping and reporting requirements of 40 CFR 60, Subpart Dc, so they were removed from this section under the Dc reference.

4. **Emission Unit Limits:** In the table, the applicable reference 33-15-12, Subpart Dc was deleted from the regeneration heater EU 4 (Reg) and hot oil heater EU 4 (Hot oil) since the subpart was determined not to apply to those units.
5. **Monitoring Requirements and Conditions:** In the table, the applicable reference 33-15-12, Subpart Dc was deleted from the regeneration heater EU 4 (Reg) and hot oil heater EU 4 (Hot oil) since the subpart was determined not to apply to those units. For clarification, “acid gas” was added to 5.B.2)b) and emission unit identification was added to 5.B.6).
6. **Recordkeeping Requirements:** In the Monitoring Records Table, the compliance monitoring record referencing 33-15-12, Subpart Dc was deleted from the regeneration heater EU 4 (Reg) and hot oil heater EU 4 (Hot oil) since the subpart was determined not to apply to those units. Also in the Monitoring Records Table, “acid” was added to the compliance monitoring record column for the acid gas/process/emergency flare [EU 1(Flare)]
7. **Reporting:** For clarification, “acid gas” was added to the 7.A flaring reporting.
8. **Facility Wide Operating Conditions:** no change
9. **General Conditions:** no change
10. **State Enforceable Only Conditions (not Federally enforceable):** no change

Comments/Recommendations: It is recommended that Renewal No. 4, Revision No. 0 of Title V Permit to Operate T5-O83005 be processed and considered for issuance following a 30-day public comment period and subsequent 45-day EPA review period.